

REMARKS

Claims 10-19 are pending in the application. Claims 18 and 19 are withdrawn. Claims 10 and 20 are independent. By this Amendment, Applicants present a new independent Claim 20. No new matter is being added.

Restriction is required under 35 U.S.C. 121 and 372. The disclosure is objected because the specification does not contain section heading. Applicants note that the typographical error mentioned in the Office Action at paragraph 0006 appears to be corrected. The drawings are objected to under 37 CFR 1.83(a). Claims 10-17 are rejected under 35 U.S.C. 103(a) as being unpatentable over Leimkuehler et al. (US patent application publication 2003/0020385) in view of Fisher (US patent 1,967,666).

The Claimed Invention

It is desirable, that a free edge of a compartment, for accommodating articles to be cooled, may be mounted with a strip for reinforcing the free edge otherwise for aesthetic reasons. The present invention provides a refrigerator having an inner space enclosed by a heat-insulating housing. The refrigerator includes at least one compartment for accommodating articles that are to be cooled. The compartment has a curved edge and is disposed in the inner space. A strip is adapted to be placed on the curved edge in the form of a decorative, protective or reinforcing element, and maintains its curved shape.

Response to Election/Restriction Requirement

Applicants elect, Group 1, Claims 10-17, drawn to a refrigerator, without traverse, confirming the conversation with the undersigned on September 23, 2010.

Objection to the Drawings

The drawings stand objected to under 37 CFR 1.83(a), for failing to show every feature of the invention specified in the claims, specifically the inner space and door compartment of claims 10 and 17. Applicants respectfully traverse the objection. Drawings are required "where necessary for the understanding of the subject matter sought to be patented." 35 USC § 113. Applicants respectfully submit that the subject matter of a bushing is known to persons of ordinary skill in the art, and such knowledge is enabled by the specification and the claims. Accordingly, Applicants request reconsideration and withdrawal of the objection to the drawings.

The Rejections under 35 U.S.C. § 103(a)

Claims 10-17 are rejected under 35 U.S.C. 103(a) as being unpatentable over Leimkuehler et al. (hereinafter Leimkuehler) in view of Fisher. Applicants respectfully traverse these rejections.

Independent claim 10, rejected under 35 U.S.C. 103(a) as being unpatentable over Leimkuehler in view of Fisher recites a refrigerator having an inner space enclosed by a heat-insulating housing. The refrigerator also includes at least one compartment for accommodating articles to be cooled and is disposed within the inner space. The compartment includes a curved edge. The refrigerator also includes a strip adapted to be

placed on the curved edge. The strip includes a plastic core and a metal jacket holding the plastic core in a curved configuration.

Leimkuehler does not disclose this combination of features disclosed in claim 10. For example, Leimkuehler does not disclose the combination of the compartment and the strip, as disclosed by Applicants.

With respect to these features, the grounds of rejection allege the following:

Regarding claim 10, Leimkuehler discloses a refrigerator comprising: an inner space (inside of 10) enclosed by a heat-insulating housing (wall of 10), at least one compartment (16) for accommodating articles to be cooled and being disposed within the inner space (Fig.1) and having a curved edge (24); and a strip (18) place on the curved edge (Figs. 2-3) and including a plastic core (21)

Office Action pages 5-6. Applicants respectfully disagree with the interpretation of Leimkuehler as reflected in the grounds of rejection. Leimkuehler discloses refrigerator bucket adapted to be mounted on a refrigerator door. The bucket includes a container having an open top face with a finished top edge and tabs extending downwardly from the top edge of the container for connecting the container to the refrigerator door. The refrigerator bucket also includes a trim piece operatively connected to the container for at least partially covering the finished top edge of the container.

FIG. 2 provides a perspective view of the refrigerator bucket 16. **The refrigerator bucket 16 includes a trim piece 18 that at least partially covers a container 20.** The trim piece 18 can be of various styles, colors and shapes to provide improved or varieties of styles

and appearances. Similarly, the container 20 can be of various styles, colors, or shapes to also provide improved appearance or to provide for a variety of appearances. **Preferably, both the trim piece 18 and the container 20 are composed of thermoplastics. Either or both of the trim piece 18 and the container 20 can be composed of clear plastic or an opaque plastic.** For example, where the container 20 is of an opaque plastic, a trim piece 18 of a clear plastic can be used. Similarly, where the container 20 is of a clear plastic, an opaque trim piece 18 can be used. The present invention contemplates these and other variations in the particular plastic used for the trim piece and the container.

Leimkuehler, Paragraph [0021] (emphasis added).

Applicants disclose a strip adapted to be placed only on a top edge of the curved front wall of the compartment. However, the trim piece 18 disclosed by the Leimkuehler covers the entire top face 22 along with finished top edge 24 of the refrigerator bucket 16. Further, the strip disclosed by the Applicants include a plastic core and a metal jacket adapted to cover the plastic core. However, the trim piece 18 disclosed by the Leimkuehler is merely composed of either a clear plastic or an opaque plastic.

FIG. 3 provides a perspective view of the trim piece 18 separated from the container 20. The container 20 includes an open top face 22. This allows items to be placed in the container. Along at least a portion of the top face 22 of the container is a finished top edge 24. Because the top edge 24 is finished, the container can be used as a refrigerator bucket without the use of a trim piece. **There are also downwardly extending tabs 26 that extend downward from the top edge 24 of the container 20. These tabs are used to secure the refrigerator bucket 16 to a refrigerator door 12.** Although tabs 26 are shown, the present invention contemplates that other securing means can be used such as are appropriate for a particular design

or application. The finished top edge 24 of the container 20 as well as the tabs 26 allow the refrigerator container 20 to function independently as a refrigerator bucket.

Leimkuehler, Paragraph [0022] (emphasis added).

Applicants disclose that the lateral walls of the compartment are configured with grooves, adapted to be engaged with the projections formed on the ribs of the refrigerator door. However, the engagement of the refrigerator bucket 16 with the refrigerator door 12 disclosed by the Leimkuehler is achieved by the tabs 26, which is substantially different from the arrangement disclosed by the Applicants.

FIG. 4 provides a cross sectional view taken along line 4-4 of FIG. 2 that shows the interface between the trim piece 18 and the container 20. **The bottom side 30 of the trim piece 18 contains at least one energy director 32 for use in ultrasonic welding. This is unlike standard practice where the energy director would typically be placed on both surfaces to be welded.** Placing the energy director only on the trim piece 18 allows the container 20 to be used as a refrigerator bucket without a trim piece. Because the container 20 does not include an energy director, the top edge 24 of the container 20 can be a finished surface.

Leimkuehler, Paragraph [0024] (emphasis added).

Applicants disclose that the strip includes a groove conforming to a bead configured on the top edge of the curved front wall. Further, the groove of the strip is adapted to snap-fit onto the bead for enabling the mounting of the strip on the top edge of the curved front wall. Specifically, the bead includes a cross-section in the shape of three

quarters of a circle, and the groove has a cross-section roughly in the shape of a circle segment narrower in its inlet region than at its widest point, thereby allowing the snap-fit engagement between the strip and the curved front wall of the compartment. Also, the elastic nature of the plastic core and the rigid nature of the metal jacket of the strip facilitate the snap-fit engagement between the strip and the compartment. However, the trim piece 18 disclosed by the Leimkuehler contains at least one energy director 32 for use in ultrasonic welding, thereby enabling the mounting the trim piece 18 onto the finished top edge 24 of the container 20. Additionally, the intended use of the trim piece 18 disclosed by the Leimkuehler is to merely enhance the aesthetics of the refrigerator bucket 16, however the intended use of the strip disclosed by the Applicants is to reinforce the free edge of the compartment in addition to the enhancement of the aesthetics of the compartment. Therefore, the strip disclosed by the Applicants is substantially different from the trim piece 18 disclosed by the Leimkuehler in terms of the structural configuration and the functional aspect.

For the at least foregoing reasons, Applicants submit that Claim 10 is not anticipated by Leimkuehler. Accordingly, Applicants respectfully request reconsideration and withdrawal of the rejection of Claim 10 under 35 U.S.C. 103(a) based on Leimkuehler, and ask that the Claim be permitted to issue.

Claims 11-17 depend either directly or indirectly from independent Claim 10. As demonstrated *supra*, Leimkuehler fails to disclose the combination of features recited in Claim 10, from which Claims 11-17 depend. Therefore, Leimkuehler does not anticipate

Claims 11-17 for at least the reasons given above with respect to Claim 10.

Accordingly, Applicants respectfully request reconsideration and withdrawal of the rejection of Claims 11-17 under 35 U.S.C. 103(a) based on Leimkuehler, and asks that the Claims be permitted to issue.

As motioned above, Claims 10-17 are rejected under 35 U.S.C. 103(a) as being unpatentable over Leimkuehler in view of Fisher. Applicants respectfully traverse these rejections. Leimkuehler in view of Fisher does not disclose the combination of features disclosed in Claim 10. For example, Leimkuehler in view of Fisher does not disclose combination of the compartment and the strip, as disclosed by Applicants.

With respect to these features, the grounds of rejection allege the following:

Leimkuehler does not disclose a metal jacket holding the plastic core in a curved configuration. Fisher teaches an object 1 having a curved edge (perimeter of 1) surrounded by a metal jacket (6) holding a core (5) in a curved configuration (Fig. 1). It would have been obvious to one of ordinary skill in the art at the time of the invention to modify the refrigerator of Leimkuehler wherein the edges of strip 18 are surrounded with a metal jacket as taught by Fisher, since it would have provided a decorative metal facing on the strip.

Applicants disclose that the strip is manufactured by co-extrusion of the metal jacket with the plastic core. Thereafter, a piece is cut from a straight strip in the length required for the front wall and bent to a radius of curvature corresponding to the curvature of front wall, which results in plastic deformation of the metal jacket. Further, a thickness of the metal jacket is chosen for allowing the strip to retain its curved

configuration after bending against the plastic core. Moreover, the intended use of the metal jacket disclosed by the Applicants is to provide reinforcement to the strip and enable snap-fit engagement of the strip with the curved front wall of the compartment. However, the sheet metal strip 6 disclosed by Fisher is bent at part 8 and 9 for mounting the body member along a periphery of the circular panel 1. In such instance, the sheet metal strip 6 rigidly holds the body member onto the circular panel 1, and accordingly removal of the sheet metal strip 6 or/and the body member would require substantial effort. However, the strip disclosed by the Applicants may be easily removed and remounted on the curved front wall of the compartment. Therefore, the metal jacket disclosed by the Applicants is substantially different from the sheet metal strip 6 disclosed by the Fisher in terms of functional aspect.

For the at least foregoing reasons, Applicants submit that Claim 10 is not anticipated by Leimkuehler in view of Fisher. Further, as discussed *supra* Claim 10 is not unpatentable over Leimkuehler. The addition of Fisher does not overcome the failure of Leimkuehler to teach those features. Moreover, Claims 11-17 depend either directly or indirectly from Claim 10, and thus is neither anticipated nor taught by Fisher. Therefore, Claims 11-17 are patentable over Leimkuehler in view of Fisher for at least the reasons given above with respect to Claim 10. Accordingly, Applicants respectfully request reconsideration and withdrawal of the rejection of Claims 10-17 and ask that the Claims be permitted to issue.

The newly added independent Claim 20 recites a refrigerator having an inner space enclosed by a heat-insulating housing. The refrigerator also includes at least one compartment for accommodating articles to be cooled and is disposed within the inner space. The at least one compartment includes a curved edge. The refrigerator further includes a strip placed on the curved edge. The strip includes a plastic core and a metal jacket holding the plastic core in the curved edge. Specifically, the strip has a groove into which the edge of the compartment for accommodating articles to be cooled is inserted.

The specification discloses that the strip includes a groove into which the curved edge is inserted, as recited in the new independent Claim 20. Further, the groove of the strip is shown in Fig. 3.

As can be seen in particular in the sections shown in FIGS. 2 and 3, a bead 8, with a cross-section in the shape of three quarters of a circle, is formed on the upper edge of front wall 4. **A reinforcing and decorative strip 9 is interlocked on this bead 8 in that bead 8 is held in a groove 10 of strip 9. Groove 10, like strip 9 itself, has a cross-section roughly in the shape of a circle segment, which extends over an arc of more than 180.degree. so that groove 10 is narrower in its inlet region than at its widest point.** Strip 9 consists of a core 11 of a plastic material, which may be the same material as in drawer 1, and a jacket 12 of metal which essentially covers the visible outer surface of strip 9. Strip 9 is manufactured by co-extrusion of metal jacket 12 with core 11, a straight strip being initially obtained. A piece cut from this straight strip in the length required for front wall 4 is then bent to the radius of curvature corresponding to the curvature of front wall 4. In the metal of jacket 12 this bending results in plastic deformation, whilst in the plastic of the core it is still largely elastic. The thickness of the metal jacket is chosen as approx. 0.2. mm so that strip 9 retains its curved

configuration after bending against any readjusting force of core 11.

Specification paragraph [0016] (emphasis added).

In addition to what demonstrated *supra* with respect to Claim 10, Leimkuehler does not teach or disclose this combination of features. For example, Leimkuehler does not disclose or teach about the strip having a plastic core, a metal jacket, and the groove into which the edge of the compartment is adapted to be inserted, as recited in Claim 20. Further, the addition of Fisher does not overcome the failure of Leimkuehler to teach those features. Thus, Claim 20 is patentable over Leimkuehler in view of Fisher.

For at least the forgoing reasons, Applicants submit that the new independent Claim 20 is not unpatentable over Leimkuehler in view of Fisher and respectfully asks Claim 20 be permitted to issue.

CONCLUSION

In view of the above, entry of the present Amendment and allowance of Claims 10-20 are respectfully requested. If the Examiner has any questions regarding this amendment, the Examiner is requested to contact the undersigned. If an extension of time for this paper is required, petition for extension is herewith made.

Respectfully submitted,

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